

REMARKS

Applicants would initially like to thank the Examiner for consideration of the references cited in Applicants' Information Disclosure Statements, as evidenced by the signed and returned forms PTO-1449.

Claims 1-3 have been rejected under 35 U.S.C. § 102 as anticipated by Bahrle et al. ("Bahrle"). Claims 4-5 and 7-9, which depend from claim 1, have been rejected under 35 U.S.C. § 103 as obvious over Bahrle. Claims 1-9 have been rejected under 35 U.S.C. § 112 for an informality. Claim 6 has been objected to as duplicative of claims 4 and 7. Claims 25-32 have been subject to a restriction requirement and have not been examined.

Claims 1-9 are now in the application. Claim 1 has been amended. Claims 25-32 have been withdrawn.

Claims 1-12 have been rejected under 35 U.S.C. § 112 as allegedly indefinite for a lack of clarity in the sequential relationship between the plating and applying steps based on the result called for by the wherein clause. Claim 1 has been amended to clarify that the photoresist substantially prevents the conductor from contacting the first and second sides of the wiring board during the filling step. Claim 1 is now clear, definite and satisfies the statute. Withdrawal of the rejection of claims 1-12 on this basis is therefore requested.

Claim 1 and claims 2-3 that depend therefrom have been rejected under 35 U.S.C. § 102 as anticipated by Bahrle. Claims 4-9, which depend from claim 1, have been rejected under 35 U.S.C. § 103 as obvious over Bahrle in view of the Official Notice. Applicants thus address all rejections as they apply against the teachings of claim 1 as amended.

Claim 1 recites two distinct steps: "plating an inner surface of the hole in the board with a conductor" and "filling the hole in the board with a conductor." In order to anticipate

claim 1, the applied reference must similarly teach these two distinct steps. This is not the case in Bahrle, such that the rejection for anticipation may not be properly maintained.

Specifically, as noted in the Office Action, Bahrle has a step of plating a hole. Indeed, the prior Office Action identified “electroplating with copper 6” to meet this claimed limitation. The current Office Action cuts and pastes that prior rejection, with the modification of “filling (electroplating) with copper 6.” Clearly the supporting disclosure in Bahrle refers to only a single step, not two distinct steps as recited in claim 1. There is no other activity in Bahrle that corresponds to the distinct claimed step of “filling the hole” as recited in claim 1. Since this step is completely missing from Bahrle, this reference does not anticipate claim 1.

Applicants note that the Office Action implies that it is obvious to fill a hole in a wiring board. However, doing so in Bahrle would cause the conductor to spill over onto the first and second sides of the wiring board. Claim 1 in contrast requires that the photoresist substantially prevents the conductor from contacting the first and second sides of the wiring board, which is neither taught nor suggested by Bahrle. The methodology of claim 1 is therefore not obvious over Bahrle.

Accordingly, claims 1-9 are patentably distinct over the applied art. Withdrawal of the rejections against these claims and allowance of the same are therefore requested.

Claim 6 has been objected to as duplicative of claims 4 and 7. Applicants respectfully traverse the rejection. Claim 4 recites a minimum diameter without any limitation on the aspect size, whereas claim 7 recites both a minimum diameter and a limitation on the aspect size. It is therefore possible for a product to satisfy claim 4 but not claim 6, *e.g.*, a diameter of 0.1 with an aspect ratio of 5. Similarly, it is possible for a product to satisfy claim 7 but

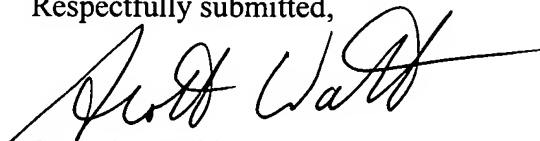
not claim 6, *e.g.*, a diameter of 0.5 with an aspect ratio of 8. Claims 4, 6 and 7 thus have different scopes and are not duplicative. Withdrawal of the objection on this basis is therefore requested.

Claims 25-32 have been subject to a restriction requirement. Applicants disagree with the basis of that restriction, as any search for the subject matter of claims 1-9 would obviously be relevant to the search of claims 25-32, and vice versa. Applicants have nonetheless withdrawn these claims to facilitate prosecution.

In view of the foregoing, the application is believed to be in condition for allowance, and a notice to that effect is earnestly solicited.

The Commissioner is hereby authorized to charge any missing or insufficient fee(s) or credit any overpayment, to Deposit Account No. 19-4293 (Case No. 12492.0274).

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Scott Watkins", with a long horizontal flourish extending to the right.

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